

LIST

LONG ISLAND SINCLAIR TIMEX GROUP
INCORPORATING * NYTSE OF NEW YORK CITY

ISSUE: May 1990

* NEW YORK TIMFX SINCLAIR ENTHUSIASTS: NEXT MEETING JUNE 10



DISK DRIVES SUPPORTED:

1 OLIGER
2 LARKEN
3 AERCO

LIST MEMBERSHIP IS \$15.00. LIBRARY TAPES ARE AVAILABLE, WRITE THE ADDRESS PRINTED BELOW.

DON'T BE AGGRAVATED!
A DUTCH PARCHEESI-LIKE BOARD GAME - by Cedric R. Bastiaans

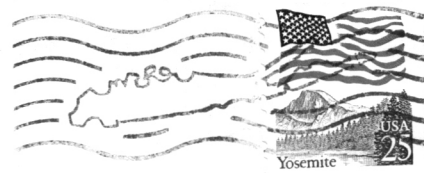
THE CD FOR THE SPECTRUM by John Pazmino

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L.I.S.T.
5 PERI LANE
VALLEY STREAM, NY
11581



TO:

Don Lambert JAN/91
3310 Clover Dr. S.W.
Cedar Rapids, IA
52404

FIRST CLASS MAIL
DATED MEETING NOTICE

UPPER RIGHT
CORNER OF
YOUR LABEL
IS DATE OF
LAST ISSUE.

----- LIST OFFICERS -----

PRES. HARVEY RAIT
 TRES. ROBERT MALLOY
 COR. SEC. JOHN PAZMINO
 EDITOR. FRED STERN
 LIBR. TOM SKAPINSKI

PLEASE SEND INQUIRIES TO:

LIST

MR. HARVEY RAIT

5 PERI LANE

VALLEY STREAM, N.Y. 11581

PLEASE SEND SUBMISSIONS TO:

LISTING

MR. FREDERIC STERN

214 ROBERTS ST.

HOLBROOK, N.Y. 11741

NYTSE

NYTSE MEETS THE MONDAY AFTER
 THE LIST MEETING AT:
 MISS KIMS RESTAURANT
 PARK AVENUE SOUTH
 BETWEEN 21 ST. AND 22 ST.
 MEETINGS START 7:30 PM.

 COMING EVENTS:

JUNE 10, 1990 LIST MEETING AND

SWAPMEET

JUNE 11, 1990 NYTSE MEETING

MEETING MINUTES

MAY 20, 1990

THIS IS OUR SECOND MEETING AT
 THE WOODBURY NURSING HOME.

HARVEY CALLED THE MEETING TO
 ORDER AT 2:30PM.

JOHN PAZMINO HAS VOLUNTEERED AS
 CORRESPONDING SECRETARY.

HUGO DI GIOVANNI IS THE MAY
 MAN-OF-THE-MONTH AT THE NURSING
 HOME. (WAY TO GO HUGO).

WE WERE ALL GLAD TO SEE EDGAR
 GROSS AGAIN. EDGAR NEEDED HELP
 INTERFACING HIS TWO NEW DISK
 DRIVES WITH HIS AERCO CONTROLLER
 WE HAD A ROUND TABLE DISCUSSION
 TO HELP EDGAR.

TOM SKAPINSKI INFORMED US THAT
 OUR SISTER GROUP SINCUS IS NO
 LONGER PUBLISHING A NEWSLETTER.

COMPUTERS BUYERS GUIDE IS A NEW
 MAGAZINE WHICH IS PUBLISHING
 ARTICLES FOR ALL THE POPULAR
 COMPUTERS. IT IS FILLING THE
 VACUUM LEFT BY COMPUTER SHOPPER
 WHEN IT WENT TO ITS ALL IBM PC
 AND CLONE FORMAT. LIST WILL BUY
 A SUBSCRIPTION.

WE RECEIVED WORD THAT UPDATE
 MAGAZINE IS TO BE TAKEN OVER BY
 FRANK DAVIS IN OCT. 1990.
 SUBSCRIPTION PRICE IS \$18.00 FOR
 4 ISSUES.

FRED INFORMED US THAT TIMEX
 TECHNICAL TIDBITS HAS SOLD OUT.
 THE SECOND PRINTING IS SCHEDULED
 FOR JULY WITH A SEPTEMBER
 RELEASE.

LIMARC HAMFEST

 AFTER THE MAILING OF THE APRIL
 NEWSLETTER, THE EDITOR RECEIVED
 WORD THAT THE LIMARC HAMFEST
 AND SWAPMEET WAS THE MORNING OF
 OUR MAY 20, MEETING. FRED AND
 TOM WENT TO THE HAMFEST.
 THE TURN-OUT WAS NOT AS GOOD AS
 FIRST POSSIBLY DO TO THE REPORTS
 OF BAD WEATHER. THERE WAS A GOOD
 SELECTION OF COMPUTER HARDWARE
 SUCH AS MODEMS, DISK DRIVES,
 POWER SUPPLIES, AND KEYBOARDS.
 TS1000 WERE OF SALE FOR \$10.00 -
 \$20.00 DEPENDING ON CONDITION.
 IN GENERAL THE HAMFEST WAS GOOD.

COMING EVENTS

 OUR NEXT MEETING AND SWAPMEET
 WILL BE HELD AT:
 HARVEYS HOUSE
 5 PERI LANE
 VALLEY STREAM, N.Y. 11581.
 OUR NEXT MEETING DATE IS
 JUNE 10, 1990.
 ADMISSION FEE IS:
 \$1.00 FOR MEMBERS
 \$6.00 FOR NON-MEMBERS
 FREE FOR NEW OR RENEWING MEMBERS

SPECIAL THANK YOU

 TO MS. KIM GIDIA AND THE STAFF
 OF THE WOODBURY NURSING HOME
 FOR THERE HOSPITALITY AND
 EFFORTS TO MAKE OUR MEETING A
 GREAT SUCCESS.

CLASSIFIEDS

 THIS CLASSIFIED SECTION IS
 AVAILABLE TO ALL LIST MEMBERS
 FREE OF CHARGE.
 THE ONLY RESTRICTION IS THAT
 IT IS TO BE USED ONLY FOR THE
 SEEKING, SELLING OR SWAPPING
 OF SINCLAIR, TIMEX OR MICROACE
 COMPUTER EQUIPMENT, PERIPHERALS
 AND SOFTWARE.
 LISTING, LIST, AND ITS OFFICERS
 DO NOT ENDORSE, WARRANTY, OR
 GUARANTEE ANY OF THE ITEMS
 LISTED IN THIS CLASSIFIED
 SECTION

IF YOU HAVE A COPY OF O-SAVE,
 FOR THE TS1000 PLEASE CONTACT
 FRED STERN 516-737-0963.

NEEDS TS1000 RAM PACKS
 D K STOICHEFF
 605 MONTGOMERY
 LAUREL MD 20707

I NEED ORIGINAL MANUAL TS2068
 JESS WYDER
 17 ACADEMY ST.
 FISHKILL N.Y. 12524-1301

I AM LOOKING FOR A COPY OF
 (MASTERING MACHINE CODE ON YOUR
 ZX-81, BY TONI BAKER)
 DONALD B LAMEN
 RD 3 - BOX 3404
 WINDSOR, N.Y. 13665

CONTINUE ON PAGE 8

LETTERS



Editors Note:

Perhaps one of
you readers can
help Robert!

Robert F. Cronin, Jr.
RD 2 Box 223
East Chatham, New York 12060
April 17, 1990

Long Island Sinclair Timex Users Group
c/o Harvey Rait
5 Peri Lane
Valley Stream, New York 11581

Dear Mr. Rait:

I'm hoping that your Timex-Sinclair users group (LIST) is still functioning. Your address was in the listing in Computer Shopper magazine.

My ZX81 has continued to function since I first put it together in 1982. Recently its had a modification to increase RAM to 40K (8K of which is in the famous "hole" between 8192 and 16383) and enable the character set to be changed at will. But one thing it still lacks and I've always wanted is high resolution graphics.

I have not been able to decipher the ROM program enough to know how it's done. A hardware solution may not be compatible with the modification, so I'm looking for hi-res. software.

An old magazine advertisement by N. Elmalah offered a software hi-res package that seemed good, but I'm no longer able to make contact.

Can your group help me to obtain hi-res software? I would most appreciate it. I am also interested in the LIST users group. Please send information on both. Thank you.

Sincerely,

Robert F. Cronin, Jr.

Robert F. Cronin, Jr.



WILLIE ROLDAN
1957 BRONXDALE AVE. #D41
BRONX, N.Y. 10462

Dear Harvey,

I spoke to you a few short nights ago about the T/S 2068 and my interest in it from a musical point of view. Well, in addition to using the "Music Machine" midi-interface with my synthesizers and drum machines etc... I also use it for word processing (Tagword) and for printing headlines and text for church flyers (Pixel Print). I also use Pro-File for mailing labels and sorting out whatever needs sorting. An excellent file would be the Times-User Groups still active. Anyway, it's good to know that T/S interest is very much alive and well. As I expressed to you over the phone, I would like very much to communicate with other musicians who may have implemented MIDI into the T/S. In a limited way I have, through use of the "Music Machine" and the single software program its creators sent to me.

Enclosed is my fee for subscription and membership. If I can get out to where you are, I will (include directions) and also the Manhattan groups. I'll be looking forward to your letter.

Editors Note:

TS-MIDIS
Unit!!!

Sincerely,
Willie Roldan

LIST REVIEW



List Questionnaire

Please take a few minutes to complete this survey and return it to L.I.S.T.

Its results will be used to better serve you.

Name: MARINUS W. HEUSEVELDT

Address: 3955 HALL MARK CIRCLE

City: LANTANA State: FL Zip: 33462

Please Name Hardware	Primarily Used	Secondary	Tertiary
Computer:	QL	2068	1000
Ram Pack:	Trump Card	64K	64K
Printer:	Legend 820	2040 - Canon for PC Jr	
Modem:		2050	
Other Accessories	5 1/4" 80T Dual Drives	5 1/4" dual Drives	
" "	RGB Monitor	RGB Monitor	
" "		Light Pen	

Please Name Software	Primarily Used	Secondary
Business/Professional	Xchange + GRAM ^{mat}	Tasword II on 2068
Utility	Lightning + Testmask ^{at}	Hot Z-Ares on 2068
Communication	ZTerm 64 on 2068	ZTerm 80 on Hi Res 1000
Game		
Other	Success CPM on QL	On T3000 + Parkland's Profile ^{Enhanced}
Other		IBMulator on QL

Also

Hardware mods

Software mods

Speak Your Piece:

Tell us how you feel that LIST and Listing can be improved. X

I am an "out of town" - my down in Florida.

I subscribe to your newsletter for information of what is happening in Sinclair World and information about using my 1000 - 2068 - QL. I will continue to do so as long as the above items are met

What more can I say? Keep it up.

M. W. Heuseveldt

We must be doing
Something
Right?

The
editor



LIST Review Letters

List Questionnaire

Please take a few minutes to complete this survey and return it to L.I.S.T.
Its results will be used to better serve you.

Name: Robert L. Howard, WA6DLI

Address: 750 North Valetan Ave.

City: West Covina State: CA Zip: 91790
91790

Please Name Hardware	Primarily Used	Secondary
Computer:	Sinclair QL	Timex 2068 IBM clone AT
Ram Pack:	TrumpCard	AT 1 meg.
Printer:	Canon B1-20 Ink Jet	Texas Instr. 855
Modem:	2050 Timex	Modapier for QL
Other Accessories	Sinclair RGB Commodore 2002 monitors	Relisys Multi-Sync

Please Name Software	Primarily Used	Secondary
Business/Professional	Xchange Psion	Ability Plus
Utility	Quanta Library	Mandelbrot Explorer
Communication	Satellite GM41HJ QCode	Sat-Bahn GrafTrak Ability Comms
Game	Many Spectrum	F19 Sleuth
Other	Astronomy	PCGlobe Plus
Other	Geography	GeoChron Clock

Speak Your Piece:

Tell us how you feel that LIST and Listing can be improved. Y

I have been a long time mail member of LIST. Seems like most of the founders have left to other fields. I would like to r

recommend to Steve Kaye, who had the NASA Symposium for Teachers article in the last LIST, to search the library for my old Sat-Bahn program for the 2068/Spectrum as he might find it useful for his students to plot Russian and US satellites and shuttles.

If no longer in library, I can send an updated version if he sends a cassette to me. I spend a lot of time tracking these things and keeping in touch with European monitors who translate the Russian communications. See enclosed MIA letter for a while back

I also belong to CATS and QZX, the Journal for Ham Radio applications of the Timex Sinclair computers.

I have continued LIST because of the interesting series of reprints from other newsletters that I had not seen before... especially the theory of the 2068 expansion not completed by Timex

Sorry about the typing but I haven't used the EP-44 for ages. About all I have that can fill out a form, not an easy task for a computer printer.

I think most people have exhausted their use of computers. I keep three busy with digital radio, satellite plotting, Mandelbrot probing, and a large volume of correspondence. Also ast astronomy programs.

Donated my ZX-81/TS-1000 equipment to QZX member who gets new hams onto packet radio with a TS-1000 and ComLink I.

I figure it costs \$700 to make an IBM clone equal a QL with the Sinclair monitor. so have bought spare QL's for the future.

Best

Bob Howard
WA6DLI

Editors Note
The typing is
OK.
Thanks Bob.
JH

LIST QUESTIONNAIRE

Donald S. Lambert
3310 Clover Drive S. W.
Cedar Rapids, IA 52404 Tele: 319 364-4330

Computers: ZX80, ZX81, T/S 1020, T/S 1520, PC 8300, T/S 2068
and T/S 2068 with Spectrum ROM.

Memory Storage (RAMS): Ramdisk for T/S 2069, T/S 1016, Hunter
board, Fred Nachbaur's memory board, Memotech Memopaks 16K, 32K
and 64K.

Printer: Mindware for T/S 1020, T/S 2040, Okidata 82A dot
matrix, Royal Letter Master daisy wheel--** C A U T I O N **--
Don't try the Royal Letter Master on the T/S 2068 for it may
pull the 5 volt regulator down to 0 volts and thus blow the
regulator and then on the next power up take out the 5 volt
chips on the T/S 2068. I have only used it a couple of times on
the T/S 1020.

Printer interfaces: AERCO 2068, Memotech for the T/S 1020.

Modem: 2050, Radio Shack Model 1 now being interfaced to the CAI
buffer and the T/S 1020.

Other Hardware: Memotech Memotext module (doesn't work),
Memotech Hi Res Graphics module. ZAD board (no instructions)

Mass Storage: Larken 2068 disk interface, CAI stringy floppy for
the T/S 1020, T/S 2020 tape recorders, Radio Shack Minicassette 9
tape recorders, GE Data Recorder. On order ZX81 Larken disk
interface.

Disk drives: 2 80 track DS DD 5 1/4 and several 40 track DS DD
5 1/4

Projects: external keyboard for the T/S 1020, Passive tape load
aid for T/S 1020 and T/S 2068.

Software: I have quite a bit but the only one I use a lot is a
tape version of MSCRIPT programmed by Jack Doherty which I
converted to Larken disk drive. I use George Chambers Larken
Disk utility disk often for the Larken. Am trying to organize my
software library.

LIST.
LIST.
LIST.



SPEAK MY PIECE:

I have almost 4 years or maybe more of LIST or LISTING
newsletter and there have been a lot of great stuff which I am
going to have to reread to see what I have forgotten about or
didn't understand at that time. I will try to get it set up in
my master file along with material from none T/S publications
with articles on T/S subjects all cross referenced by
subject/author/computer/ so that it can be found again when I
want it. But back to LISTING, it is only as good as the members
that submit to it.

Over the years I have learned a lot from LISTING and I have
corresponded with a few of the contributors to increase my
understanding of the T/S computers. I just wish that LISTING
could look like it did a few years ago but those days are gone

SCREEN
MACHINE



I fear. In some ways I am surprised that there are so many that
are still into the T/S computers when there are so many so
called ready to run computers out there. But I want a computer
that is slower and I can pretend I can program whether I can or
not, not one that is so complex that the manual for the word
processor is a thousand page book that no one can learn all. I
guess all I can say is to keep up the good work and maybe some
like me that is practically all alone with his T/S computers has
some information coming in. I am in a group or should I say I am
the lead man in a group of a total of 5 so I guess that tells
you of the problems I face when something does not work and I
can't figure out the instructions nor what is the proper screen
display for the software.



THE CD FOR THE SPECTRUM by John Pazmino

Latest dispatches from the old country about the new CD for the Spectrum are simply outrageous! From them I assemble for you -- only here in LISTings -- the dissa & datta on this remarkable appliance.

The first CD with Spectrum applications on it was issued by CodeMasters, a large software house in Warwickshire, England. It saw light in January of this year and, altho so far there is just this one disc now, other SW firms are booking programs for their own CDs later this year.

The CodeMasters CD comes in an alluring box containing the very disc, an audio cassette, a hookup cable, and instructions. Future titles will optionally be packaged in this same manner or, if you already have the tape and cable from a previous purchase, in sleeves by themselves like audio CDs.

Actually the CD scheme was elaborated for three home computers, the three common 8-bit 64K instruments in the UK that still run off audio cassettes. These are the Spectrum, the Commodore-64, and the Amstrad. Other computers in England already have regular floppy disc systems and the CD system would be unappealing for them.

To save costs -- and to show off the immense capacity of the compact disc -- each program is etched six times, twice for each of the three computers! CDs are vulnerable, in spite of the industry's propaganda, so if the one copy of a program gets damaged and fails to load the other loads in its stead.

The applications are all games and are of so-so to good quality according to British standards. There are 30 different ones (180 recordings!) ranging over all the usual formulae: autoraces, platforms, gambling, sportsims, arcades, and so on. While they got passable in the UK when they came out on cassette over the years, their quality surpasses anything homebred in the United States for the Timex or imported Spectrum. Plausibly, our British cousins will get the CD largely for its techie and novelty value. We statesiders will lust after the very games inscribed on it.

It should be possible to transfer the recordings to cassette, being that the detailed coding of the program on the disc is reportedly identical to that on cassette. However, the far denser packing of the files on the disc, to achieve ultrafast loading, will surely be too much for even the highest caliber of audiotape to faithfully capture.

In operation you first cobble up the audio output socket of your regular CD player to the joystick socket -- not the 'ear' socket -- of the computer with the special hookup cable. The reason for this cobbling is that the C-64 has a proprietary cassette port, not the standard jack, while all the three computers have the same Atari joystick port. The Spectrum, you know, has no joystick port on the stock unit. But since the bulk of the games on the CD require a joystick you'll already have fitted onto the rear cardedge a Spectrum joystick module.

Now the output from the CD player is analog audio (horribly raspy and grating!) and the joystick port requires a digital signal. The special cable has an inline circuit that performs the A/D conversion. This calls up the prospect of using this cable, along with suitable custom SW, to rig up a laboratory sensing/monitoring system.

With the apparatus connected up you load the audio cassette in the usual manner. The program on this tape is a fastload and volume-level utility to properly capture the bits pouring in thru the joystick socket and post them into memory as a vivid program. There is no facility to govern the CD player from the computer; CD players generally have no means for remote control anyway. To load a desired

program you set its associated track and initiate 'play' at the player's own controls.

A multiload game, for example, can not by itself invoke the player to send in the next block of code. You must manipulate the player as you would a cassette player. In other words, this CD scheme is merely a high density storage and high speed loading device. It is not at all a bassarata computer discdrive. There is no mechanism for file manipulation, random access, or, for that matter, even just saving a game in midsession. Remember that a CD is truly a read-only medium.

Reports claim essentially flawless performance of the CodeMasters CD system. Being that the Spectrum's cassette features are rather reliable and dependable to begin with, there ought to be no real improvement in the success rate for loads. On the other hand, the load speed is unbelievable compared to cassette. The influent bitstream is about 9600 bps, about 8 times that of cassette. The entire 48K RAM of the Spectrum fills up in 40 seconds.

Here, for once, we Americans are more advantaged than the Brits. In England discdrives for the Spectrum are still quite rare and everyone still works with tapes. So to them the enhanced load speed of the compact disc does seem miraculous. In the former colonies discdrives for the Spectrum (or Timex) are common and we are, therefore, kind of used to high speed loading already. If anything, we would regard the CD system as a downstep from a discdrive, due to its utter lack of the usual and ordinary disc functions and absence of the ability to save files!

Would not the CodeMasters disc be a capital accessory for the TS2000, as distinct from the true Spectrum? Not for a stock machine. Being that all the programs are games, you can expect them to be written in MC peculiar to the Spectrum ROM. Furthermore the joysticks on the Spectrum and the Timex operate quite differently. The Spectrum's is an adhoc port number assigned by the plugin joystick module; the Timex's is controlled thru the AY soundchip. Some shrewd hardware ace could work around these differences. Or you can just hang an orthodox Spectrum joystick module on the Timex via a twisterboard.

Once the interface is worked out everything should run well. With any of the Spectrum emulators circulating in the Timex world the TS2000 becomes a virtual replica of the Spectrum and all the CD programs should run properly on it.

All in all this compact disc scheme is an amazing advance for the Spectrum, particularly now when the lesser folk regard this instrument as an edurnate toy. To actually get the CodeMasters CD kit the price is £19.95 (about \$35) direct from CodeMasters, POB 6, Southam, Warwickshire CV33-0SH, England.

#

FROM PAGE 2:

LARKEN DISK DRIVE LOADER \$5.00
5 1/4" DISK. THIS PROGRAM WILL
AUTOMATICALLY CAT AND LIST TO
THE SCREEN FILES (100/155) THAT
YOU CAN LOAD BY MOVING THE BAR
OVER YOUR CHOICE. PRESS ENTER.
PAGE BACK AND FORTH ON LONG
CATALOGS. CHANGE DRIVES. BREAK
TO BASIC. AUTOSTART. YOU WILL
BE PLEASED IF YOU TRY IT!
ORDER FROM: TOM SKAPINSKI,
7 ATKINSON LA., CORAM NY 11727
END FILE NOT FOUND ERRORS!!!

A FINAL WORD

MY NAME IS FRED STERN AND I AM
THE EDITOR OF THIS EDITION OF
LISTING.

THANK YOU GO TO TOM SKAPINSKI
AND JOHN PAZMINO FOR THERE TIME
AND EFFERTS.

SEE YOU ALL AT THE NEXT MEETING.



DON'T BE AGGRAVATED!

A DUTCH PARCHEESI-LIKE BOARD GAME - by Cedric R. Bastiaans © 1987

The listing which follows is for an entertaining boardgame (for both TS2068 and Spectrum 48K), quite popular in Germany and Holland. I became very interested, not only because of fond memories of my youth, playing the game, but also because the program is a marvel in memory-saving techniques and has colorful sprites and UDG's.

I got permission from the Dutch computer magazine SINCLAIR GEBRUIKER (which means Sinclair User) where it first appeared, to translate it for the members of the L.I.S.T. group. I started and finished this job even before I departed for Holland.

It works in a fashion, but not totally. Regrettably, the magazine has been defunct since December 1985, just when I had finished the adaptation and translation! I tried to locate the author Ferry Groothedde, but couldn't.

It is my hope that some member of our group may find the problem; I have stared at the program for too long now, to no avail...More about the problem later on.

First some information...

The original boardgame is called "Mensch, erger dich nicht!" in German and "Mens, erger je niet!" in Dutch (broadly translates as "Don't be aggravated!"). I have been told that it is much like PARCHEESI. I have consequently called the program PARCHISI, to accommodate the 8-character maximum for program titles (Zebra FDD).

The program may take several hours to key in, but I have also sent L.I.S.T. a cassette for a future library tape if you can't bring up the energy.

Here are the instructions (also contained in lines 6000 - 6040) for playing this fascinating game:

1. - The game is played with 4 sets of four "men" (pawns), a die and the board or field.

Object of the game is to bring one's men into the field, move them clockwise around the field according to the throw of the die, until they are safely home, an area indicated by ###'s.

The player first to bring his or her men home, is the winner.

2. - A pawn landing on a spot already occupied by an opposing pawn, knocks it off the field! A pawn thusly knocked off cannot enter the game until the player throws a six, just like at the start of any turn.

It is not possible to knock one's own pawn off the field!

3. - There are always four players. One or two players play against the computer, which will thusly play the role of either three or two opponents respectively.

The computer can also play against itself.

4. - A pawn standing at the starting place (because a six was thrown), HAS to move again (throwing a six allows for a second throw). If this second throw would cause this pawn to bump off one of your OWN men, you are allowed to move another of your men. Next round, you HAVE to move it, however.

5. - Highest number cast, starts the game. You are RED, the computer is GREEN. RED throws first: press a key and the result is displayed. Press again to show the computer's throw.

6. - If one player plays against the computer, your color is RED and the computer plays YELLOW, WHITE and GREEN.

If two play against the computer, your colors are RED and GREEN.

7. - When it's your turn, the computer will ask you which pawn you want to move. You have four pawns, numbered 1 through 4. The die of your color needs to throw a six before you are allowed to enter a pawn in the field. Each time you throw a six, you are granted another throw!

8. - A pawn, which has entered the home area, cannot be moved anymore!

To see the game played, I suggest you enter 0 (zero) when prompted "How many will play against the computer?". The computer will draw the board, see FIG. 1. The computer will then play RED and GREEN. Because the computer knows the numbers of its own pawns, these numbers will not show. In FIG. 2 you can see this situation; all GREEN pawns are in the field (note that the GREEN quad in the right upper corner shows zero), but only two RED pawns have entered (the RED quad in the left bottom corner shows a remaining 2). On your color screen you will of course see it all in living color!

If YOU decide to play, your pawns will be numbered, as illustrated in the gameboard of FIG. 3.

The PROBLEM with the current listing is that, contrary to the intent of game rules 3 and 6, only RED and GREEN EVER PLAY! WHITE and YELLOW never do. I am embarrassed that I have not been able to solve the problem. Please help, somebody?! The game otherwise plays perfectly, but only for RED and GREEN...Sometimes a WHITE die shows, while the computer burps, but never plays...

Now for some info on the PROGRAM LISTING.

It may be necessary to indoctrinate some readers in the keying in of colored spaces. Lines 180, 190, 220, 8100 and 8200 contain black squares, which really should be colored spaces.

Try the following:

Press CAPS SHIFT (CS) and SYMBOL SHIFT (SS) simultaneously and the 'E' cursor will appear. Now press 2 and then SPACE (SP). Lo and behold! A RED SQUARE appeared!

To get back to the original background (paper) color, again press CS + SS, then 7 (if white is the paper color).

To properly key in the colored spaces in the above mentioned lines, do the following, remembering that BLUE (1) is the paper color in the game:

Line 190 - CS+SS 2 SP
CS+SS 4 SP
CS+SS 2 SP
Line 220 - CS+SS 4 SP
Line 8100 - CS+SS 4 SP
Line 8200 - CS+SS 2 SP

Well, thethathethat's all folks! Lots of fun with this and I hope that you can solve the problem. Success!

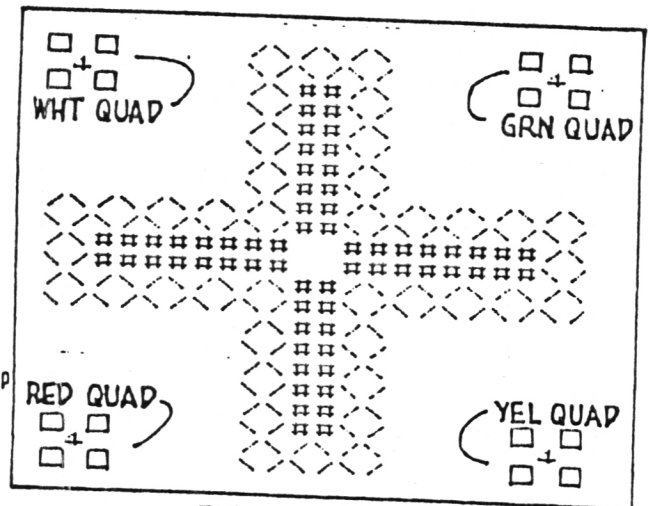
[illegible]

FIG 1


```

430 NEXT p: IF NOT v THEN GO TO 980
440 IF w THEN LET v=w
450 IF v+21z>80 THEN LET x(j)=x(j)+e
470 LET aa=VAL b$(j,v): LET aaa=VAL b$(j,v+e): LET ab=VAL b$(j,v+21z): LET abb=VAL b$(j,v+e+21z)
500 LET a(aaa,aaa)=0: LET aq=a(ab,abb)
510 IF aq<9 AND aq>4 THEN LET y(aq-4)=y(aq-4)+e
520 IF aq>a THEN LET t(aq-a)=0: LET y(2)=y(2)+e
530 IF aq AND aq<5 THEN LET s(aq)=0: LET y(4)=y(4)+e
540 LET a(ab,abb)=j+4
550 PRINT AT 21aa-2,21aaa;"\\": AT 21aa-e,21aaa;"\\": BEEP .1, RND 1b: PRINT AT e,3;y(e): AT e,22;y(2): AT 20,3;y(4): AT 20,22;y(3):
AT 21ab-2,21abb: INK j=e: PAPER k(j);"P1": AT 21ab-e,21abb;"DN": BEEP .1, RND 1b
560 IF x(j)=4 THEN GO TO 8000
580 IF z=6 THEN RANDOMIZE: GO TO 300
590 RETURN
880 FOR p=e TO 100: NEXT p
900 FOR p=e TO 3: PRINT PAPER 0: OVER e: INVERSE e: AT p+e-27;"": NEXT p
910 BEEP e,- RND 1b: IF z=6 THEN RANDOMIZE: GO TO 300
920 RETURN
1000 IF sp=-e THEN GO TO 300
1010 LET s=INT ( RND 16+e)
1020 FOR p=e TO 3: PRINT PAPER k(j): INK 9: AT p+9,27;d$( VAL s(s,p)): NEXT p
1050 PRINT 1e: AT e,e: INVERSE e;"Your move? (0=No Move Possible)"
1060 IF LEN INKEY$ THEN GO TO 1060
1070 LET us=INKEY$: IF us<"0" OR us>"4" THEN GO TO 1070
1080 INPUT **: BEEP .05,a: LET v=VAL us: IF v THEN GO TO 1200
1100 IF s=6 THEN GO TO 1000+(50 AND y(j))
1120 RETURN
1200 IF s<6 AND NOT (s(v) AND j=4)+(t(v) AND j=2) THEN GO TO 1050
1202 IF j=4 AND a(b,5) AND a(b,5)<5 THEN GO SUB 2900+1001s
1203 IF j=2 AND a(e,7) >= a THEN GO SUB 2950+1001s
1205 IF (s(v) AND j=4)+(t(v) AND j=2)+s>44 OR (s(v) AND j=4)+(t(v) AND j=2)>40 THEN GO TO 1050
1207 IF j=4 THEN IF s<6 OR NOT y(j) OR (a(b,5) AND a(b,5)<5) THEN GO TO 1260
1208 IF j=2 THEN IF s<6 OR NOT y(j) OR a(e,7)>a THEN GO TO 1280
1210 IF (t(v) AND j=2) OR (s(v) AND j=4) THEN GO TO 2000
1215 BEEP e,b: IF j=2 THEN GO TO 1230
1220 LET s(v)=e: LET y3=b: LET y4=5: GO TO 1240
1230 LET t(v)=e: LET y3=e: LET y4=7
1240 LET y(j)=y(j)-e: PRINT AT 20,3;y(4): AT e,22;y(2): LET l=a(y3,y4): GO TO 1335
1260 LET y1=VAL b$(j,21s(v)): LET y2=VAL b$(j,e+21s(v)): LET y3=VAL b$(j,21(s+s(v))): LET y4=VAL b$(j,e+21(s+s(v)))
1270 GO TO 1300
1280 LET y1=VAL b$(j,21t(v)): LET y2=VAL b$(j,e+21t(v)): LET y3=VAL b$(j,21(s+t(v))): LET y4=VAL b$(j,e+21(s+t(v)))
1300 LET l=a(y3,y4)
1305 IF (1 AND 1<5 AND j=4) OR (1>a AND j=2) THEN GO TO 1050
1310 PRINT AT 21y1-2,21y2;"\\": AT 21y1-e,21y2;"\\":
1320 LET a(y1,y2)=0: IF j=2 THEN LET t(v)=t(v)+s: LET x(j)=x(j)+(t(v)>40): GO TO 1335
1330 LET s(v)=s(v)+s: LET x(j)=x(j)+(s(v)>40)
1335 IF 1>a THEN LET t(1-a)=0: LET y(2)=y(2)+e
1337 IF 1>4 AND 1<a THEN LET y(1-4)=y(1-4)+e
1340 IF 1 AND 1<5 THEN LET s(1)=0: LET y(4)=y(4)+e
1350 LET a(y3,y4)=v+(a AND j=2): PRINT AT e,3;y(e): AT e,22;y(2): AT 20,3;y(4): AT 20,22;y(3): AT 21y3-2,21y4: INVERSE j=4:vj: PRINT P
APER k(j);"I": AT 21y3-e,21y4;"DN"
1360 BEEP .1, RND 1b: IF x(j)=4 THEN GO TO 8000+501j
1370 IF s=6 THEN GO TO 1000
1380 RETURN
2000 PRINT 1e: INVERSE e: AT e,0;"No, you need to enter a new pawn": FOR p=e TO 200: NEXT p: INPUT **: GO TO 1050
3000 IF NOT a(a,5) OR a(a,5)>4 THEN LET v=a(b,5)
3010 RETURN
3050 IF a(2,7)<a THEN LET v=a(e,7)-a
3060 RETURN
3100 IF NOT a(9,5) OR a(9,5)>4 THEN LET v=a(b,5)
3110 RETURN

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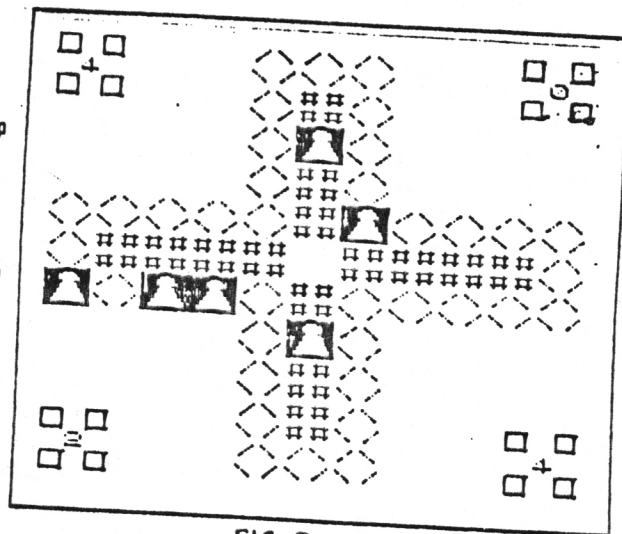


FIG 2

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3150 IF a(3,7)<a THEN LET v=a(e,7)-a
3160 RETURN
3200 IF NOT a(8,5) OR a(8,5)>4 THEN LET v=a(b,5)
3210 RETURN
3250 IF a(4,7)<a THEN LET v=a(e,7)-a
3260 RETURN
3300 IF NOT a(7,5) OR a(7,5)>4 THEN LET v=a(b,5)
3310 RETURN
3350 IF a(5,7)<a THEN LET v=a(e,7)-a
3360 RETURN
3400 IF NOT a(7,4) OR a(7,4)>4 THEN LET v=a(b,5)
3410 RETURN
3450 IF a(5,8)<a THEN LET v=a(e,7)-a
3460 RETURN
3500 IF NOT a(7,3) OR a(7,3)>4 THEN LET v=a(b,5)
3510 RETURN
3550 IF a(5,9)<a THEN LET v=a(e,7)-a
3560 RETURN
4000 LET aa=a( VAL b$(j,2), VAL b$(j,3))
4010 IF aa=j+4 THEN GO TO 360
4020 IF aa AND aa<5 THEN LET s(aa)=0: LET y(4)=y(4)+e
4030 IF aa>a THEN LET t(aa-a)=0: LET y(2)=y(2)+e
4040 IF aa>4 AND aa<a THEN LET y(aa-4)=y(aa-4)+e
4050 LET a( VAL b$(j,2), VAL b$(j,3))=j+4: PRINT AT 28 VAL b$(j,2)-2,28 VAL b$(j,3): INK j=e: PAPER k(j): "PI": AT 28 VAL b$(j,2)-e,28 V
AL b$(j,3): "ON": LET y(j)=y(j)-e
4060 PRINT AT e,3;y(e): AT e,22;y(2): AT 20,3;y(4): AT 20,22;y(3)
4080 FOR p=e TO a: BEEP .2,5tp-30: NEXT p: GO TO 300
5000 DIM d$(5,3): DIM e$(6,3)
5010 LET d$(e)=" ": LET d$(2)=" ": LET d$(3)=" ": LET d$(4)=" ": LET d$(5)=" ": LET d$(6)=" "
5020 LET e$(e)="525": LET e$(2)="153": LET e$(3)="123": LET e$(4)="454": LET e$(5)="424": LET e$(6)="444"
5030 RETURN
6000 CLS: PRINT "The game is played with 4 setsof four "men" (pawns), a die andthe board or field." "Object of the game is to br
ingone's men into the field, movethen CLOCKWISE around the fieldaccording to the throw of thedie, until they are safely home,an ar
ea indicated by 8's." "The player first to bring his other men home, is the winner."
6012 PRINT "A pawn landing at a spot alreadyoccupied by an opposing pawn,knocks it off the field! A pawnknocked off like this, can'
t re-enter the game until the playerthrows a six (as at the start ofplay)." "You may NOT knock yourself offthe field!"
6013 PRINT "There are always four players. One or two players play againstthe computer, which will thuslyplay the role of either thr
ee ortwo opponents respectively. There is also the possibility ofhaving the computer play againstitself!"
6020 PRINT "A pawn standing at the startingplace HAS to move at the nextopportunity, even when there areno more pawns of the same
colorparked outside the field!" "However, should your die cast anumber that would result in yourbumping off one of your own men,then yo
u are allowed to move oneof your other men. Next round,you HAVE to move the start-pawn!"
6022 PRINT "Highest number cast, starts thegame. You're , the computer . throws first: press a key andthe result is displayed. Pr
ess akey again to show the computer'sthrow."
6024 PRINT "If one player plays against thecomputer, your color's and thecomputer plays , and . If two play against the com
puteryour colors are and ."
6026 PRINT "If it's your turn, the computewill ask you which pawn you wantto move. You have four pawns,numbered 1 through 4. The d
ie ofyour color needs to throw a six,before you're allowed to enter a pawn in the field. Each timeyou throw a six, you are grantedano
ther throw of the die."
6040 PRINT "A pawn, which has entered thehome area, can not be moved any-more!" "Bouncing back" is NOT allowed." "Therefore, if y
ou threw too manypoints, you can't move that pawnand have to consider moving someother pawn!"
6050 PRINT "How remains to indicate how manyplayers will play against thecomputer." "u"; "SUCCESS"
6055 PRINT e;"Press any key.": PAUSE 0: INPUT "
6310 PRINT e;"How many will play against thecomputer? (0, 1 or 2)": PAUSE 0: CLS: LET s$= INKEY$: LET sp= CODE s$- CODE "J": IF s$<
"0" OR sp>e THEN GO TO 6310
6320 CLS: RETURN
7000 RANDOMIZE: FOR j=e TO 4
7010 IF j=e OR j=3 THEN GO SUB 3000
7020 IF j=2 THEN GO SUB 300+(700 AND sp)
7030 IF j=4 THEN GO SUB 1000
7040 NEXT j: GO TO 7000
8000 IF sp=-e THEN GO TO 8500
8010 INPUT "": PRINT e; AT 0,0;"You have "; "both " AND sp;"lost the game": GO TO 8500
9100 INPUT "": PRINT e; AT 0,0;" has won the game!": GO TO 8500
8200 INPUT "": IF sp THEN PRINT e; AT 0,0;" has won the game!": GO TO 8500

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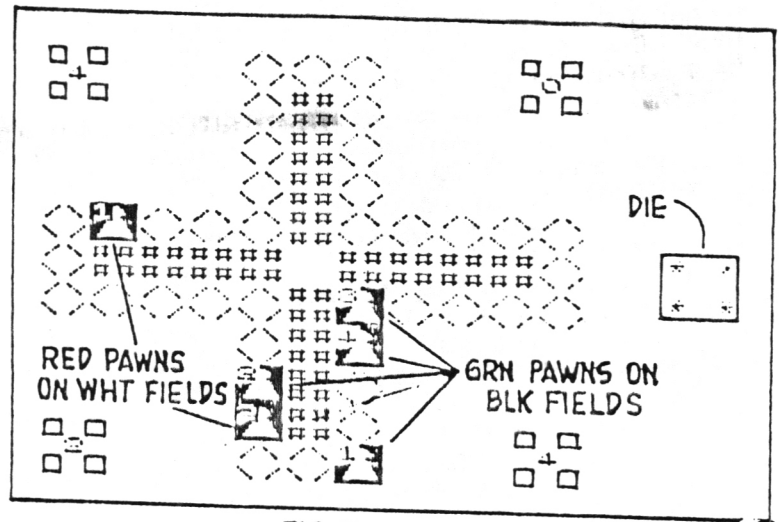


FIG 3